

PATENT

Atty. Dkt. No. AVAN/001112

**IN THE CLAIMS:**

Please amend the claims as follows:

1. (Currently Amended) An electro-optical modulator, comprising:  
a modulator chip having a low impedance and an RF electrode; and  
a microwave input chip~~[[,]]~~ coupled to the modulator chip, the microwave input chip having a thin film resistor with a low impedance for connecting an RF connector to the RF electrode of the modular chip, wherein the microwave input chip is configured to increase for increasing the total input impedance of the modulator.
2. (Currently Amended) The electro-optical modulator of Claim 1, wherein the modulator chip is ~~comprises~~ a Lithium Niobate chip.
3. (Currently Amended) The electro-optical modulator of Claim 1, further comprising a microstrip line ~~or coplanar line~~ in the microwave input chip, the thin film resistor being placed in the microstrip line ~~or in the coplanar line~~.
4. (Currently Amended) The electro-optical modulator of Claim 3, wherein the microstrip line ~~or coplanar line~~ is a straight line.
5. (Currently Amended) The electro-optical modulator of Claim 1 ~~[[3]]~~, further comprising a coplanar waveguide in the microwave input chip, the thin film resistor being placed in the ~~wherein the microstrip line comprises a first section of a microstrip line and a second section of a coplanar waveguide.~~
6. (Currently Amended) The electro-optical modulator of Claim 3, wherein the microstrip line is ~~or coplanar line~~ ~~comprises a curved line~~.
7. (Currently Amended) The electro-optical modulator of Claim 1, further comprising a plurality of bondings for coupling the microwave input chip to the modulator

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~~Lithium Niobate~~ chip.

8. (Cancelled)

9. (Original) The electro-optical modulator of Claim 1, wherein the microwave input chip is manufactured with a substrate of Alumina, Gallium Arsenide, Aluminum Nitride or other type of substrates commonly used for microwave applications.

10. (Currently Amended) An electro-optical modulator, comprising:  
a modulator chip having a low impedance and an RF electrode; and  
a microwave input chip[, ] coupled to the modulator chip, the microwave input chip having a resistor member ~~resistive means~~ with a low impedance for increasing the total input impedance of the modulator, wherein the resistor member connects an RF connector to the RF electrode of the modular chip.

11. (Currently Amended) The electro-optical modulator of Claim 10, wherein the resistor member ~~resistive means~~ comprises a thin film resistor.

12. (Currently Amended) The electro-optical modulator of Claim 10, wherein the resistor member ~~resistive means~~ comprises a lumped resistance.

13. (Currently Amended) The electro-optical modulator of Claim 10, wherein the modulator chip is ~~comprises~~ a Lithium Niobate chip.

14. (Currently Amended) The electro-optical modulator of Claim 10, further comprising a microstrip line or coplanar line in the microwave input chip, the resistor member ~~thin film resistor~~ being placed in the microstrip line or coplanar line.

15. (Currently Amended) The electro-optical modulator of Claim 14, wherein the microstrip line or coplanar line is a straight line.

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16. (Currently Amended) The electro-optical modulator of Claim 10 [[14]], further comprising a coplanar waveguide in the microwave input chip, the resistor member being placed in the ~~wherein the microstrip line comprises a first section of a microstrip line and a second section of a coplanar waveguide.~~

17. (Currently Amended) The electro-optical modulator of Claim 14, wherein the microstrip line is ~~or coplanar line comprises a curved line.~~

18. (Currently Amended) The electro-optical modulator of Claim 10, further comprising a plurality of bondings for coupling the microwave input chip to the modulator ~~Lithium-Niobate chip.~~

19. (Cancelled)

20. (Original) The electro-optical modulator of Claim 10, wherein the microwave input chip is manufactured with a substrate of Alumina, Gallium Arsenide, Aluminum Nitride or other type of substrates commonly used for microwave applications.

Please add the following new claims:

21. (New) The electro-optical modulator of Claim 1, wherein the thin film resistor has a resistance between 1-10 Ohms.

22. (New) The electro-optical modulator of Claim 10, wherein the resistor member has a resistance between 1-10 Ohms.